

CLAIMS

What is claimed is:

1. A keyboard comprising a plurality of keys marked with symbols, a frame to settle the plurality of keys thereon, and a key signal input plate disposed under the frame and generating a specific signal corresponding to the key when touched with the key, the key comprising:

a key body having a combining part combined to the frame;

a key cap combined to a first part of the key body and marked with a predetermined symbol;

a base pin protruding from a second part of the key body and touching the key signal input plate so as to let the key signal input plate sense that the key is operated; and

at least one identification pin spaced from the base pin and touching or not touching the key signal input plate so as to output the specific signal corresponding to the symbol.

2. The keyboard according to claim 1, wherein the base pin is longer than the identification pin.

3. The keyboard according to claim 2, wherein the maximum number of the identification pins is seven.

4. The keyboard according to claim 3, wherein the base pin and the at least one identification pins are disposable in positions that correspond to a 2 by 4 matrix, and the identification pins are disposable in all possible combinations of positions except a position of the base pin so as to output the specific signal corresponding the symbol.

5. The keyboard according to claim 4, wherein on the key signal input plate are provided sectors each having a sensor to be touched with the base pin or the at least one identification pin, forming matrices.

6. The keyboard according to claim 5, wherein the key covers at least eight sectors on the key signal input plate, corresponding to the 2 by 4 matrix position layout combination of the base pin and the at least one identification pin of each key.

7. The keyboard according to claim 6, wherein the key cap has a size being large enough to cover the sectors provided on the key signal input plate, wherein the number of sectors is a multiple of eight.

8. A keyboard comprising:
a case;
a plurality of keys, wherein each key has an arrangement of pins that correspond to a predetermined symbol marked on each key;
a frame, disposed in the case, that each key detachably links with to maintain a chosen position; and
a key signal input plate, disposed in the case, having a plurality of sector blocks corresponding to each key, wherein each sector block outputs signals in response to the arrangement of pins on each key.

9. The keyboard as in claim 8, wherein the keys are relocatable as desired on the frame wherein the key retains a symbol identity based on the pin arrangement of the key.

10. The keyboard as in claim 9, wherein some of the keys have different size and shape tops relative to the other tops of the other keys.

11. The keyboard as in claim 8, wherein the arrangement of pins of each key includes a base pin at a set location to indicate actuation of the key and any remaining arrangement of pins indicate the symbol identity of that key.

12. The keyboard as in claim 11, wherein the pins are arrangeable in a 2 by 4 matrix pattern.

13. The keyboard as in claim 11, wherein the base pin is longer than any other pins in the arrangement on the bottom of each key.

14. A keyboard having keys that may be relocated to positions that do not correspond to a QWERTY layout comprising:
a plurality of keys each having a key cap, a key body, and an arrangement of at least one pin on the bottom of the key body,

a frame having a plurality of apertures sized to link with key body;
a key signal input plate disposed under the frame and having a plurality of sector blocks corresponding to each aperture, wherein each sector block includes a plurality of sensors that output signals in response to the arrangement of pins on the bottom of each key; and
a case that houses the frame, key signal input plate and the keys.

15. The keyboard as in claim 14, wherein the key caps are not all the same size and shape.

16. The keyboard as in claim 15, wherein each key cap is marked with a predetermined symbol and the arrangement of the at least one pin uniquely corresponds to the predetermined symbol.

17. The keyboard as in claim 15, wherein the keys may be moved to different locations on the frame and whereby the key retains its symbol identity based on the pin arrangement on the bottom of the key.

18. The keyboard as in claim 17, wherein the arrangement of pins of each key includes a base pin at a set location to indicate actuation of the key and any remaining arrangement of pins indicate the symbol identity of that key.

19. The keyboard as in claim 18, wherein the base pin is longer than any other pins in the arrangement on the bottom of each key.

20. The keyboard as in claim 14, wherein the sensors are arranged in a matrix pattern that is a multiple of eight.

21. The keyboard as in claim 14, wherein the each sector block of the key signal input plate is comprised of eight sensors that correspond to a maximum of eight pins on each key.

22. A keyboard comprising:
a case;

a plurality of keys arranged in the case in a predetermined pattern, wherein each key has identifiers that correspond to a predetermined symbol marked on each key;

a key signal input plate, disposed in the case, having receivers corresponding to each key, wherein the receivers output signals in response to the identification means corresponding to each key.

23. The keyboard as in claim 22, wherein a frame is disposed in the case to detachably link with each key to maintain the each key in a chosen position.

24. The keyboard as in claim 22, wherein the identifiers are comprising a unique arrangement of pins on each key that correspond to the predetermined symbol.

25. The keyboard as in claim 22, wherein the receivers further comprise individual sensors to sense the arrangement of the pins.